

IN THE CLAIMS:

1-20 (Cancelled)

21. (previously presented) A differential cage for a differential gear, comprising:

a cage member with a cavity machined on an inside and having an installation opening for compensating gears and driving gears; and

an axel drive gear and a parking lock gear which form a one-piece forging together with the cage member.

22. (previously presented) A differential cage of claim 21 wherein said cage member has two bores to support respective axle driving shafts.

23. (currently amended) A differential cage for a differential gear, comprising:

a cage member with a cavity machined on an inside and having an installation opening for compensating gears and driving gears;

an axel drive gear and a parking lock gear which form a one-piece forging together with the cage member; and

~~A differential cage of claim 21 wherein said parking lock gear is being~~ disposed at a side of the axle drive gear facing the cage member and adjacent the same, the cage member being formed with said installation opening being lateral, part of said lateral opening extending into the parking lock gear for introducing said compensating gears and driving gears into the cavity.

24. (previously presented) A differential cage of claim 21 including aligned bores having a common axis to accommodate a bearing pin for the

compensating gears, a spacing of the common axis from the axle drive gear being chosen dependent on a desired size of said installation opening.

25. (previously presented) A differential cage of claim 22 wherein one of said two bores has a diameter which is great enough for a machining tool to be entered into said cavity, and a separate bearing sleeve for the associated axle driving shaft being received in said bore with said great enough diameter.

26. (previously presented) A differential cage of claim 21 wherein teeth of said axle drive gear are induction hardened.

27. (previously presented) A differential cage of claim 21 wherein teeth of said parking lock gear are induction hardened.

28. (previously presented) A differential cage of claim 22 wherein one of the bores is larger than the other bore and a bearing sleeve is mounted in the larger bore for supporting the respective axle driving shaft.

29. (currently amended) A differential cage for a differential gear, comprising:

a cage member with a cavity machined on an inside and having an installation opening for compensating gears and driving gears;

an axel drive gear and a parking lock gear which form a one-piece forging together with the cage member;

said cage member having two bores to support respective axle driving shafts;

one of the bores being larger than the other bore and a bearing sleeve being mounted in the larger bore for supporting the respective axle driving shaft; and

~~A differential cage of claim 28 wherein the bearing sleeve is being press fit~~ in the larger bore.

30. (previously presented) A differential cage of claim 21 wherein teeth of the axle drive gear and parking lock gear are induction hardened by a dual frequency induction process.

31. (previously presented) A method of making a differential cage for a differential gear, said differential cage comprising a cage member having a cavity machined on an inside surface, an installation opening for introduction, accommodation, and support of compensating gears and driving gears, and an axle drive gear and a parking lock gear, comprising the step of:

forging the cage member, the axle drive gear, and the parking lock gear from a single part.

32. (previously presented) A method of claim 31 wherein the differential cage has two bores to support respective axle driving shafts.

33. (previously presented) A method of claim 32 wherein a diameter of one of said bores is made greater than the other one, and said inside surface of the cavity is machined through the bore with the greater diameter, and a separate bearing sleeve for support of the respective axle driving shaft is inserted into the bore with the greater diameter.

34. (previously presented) A method of claim 31 wherein teeth of the axle drive shaft and/or teeth of the parking lock gear are induction hardened in a dual frequency induction process, the respective teeth being subjected to a high frequency and a medium frequency simultaneously in a dual frequency induction process, a frequency mix of the high frequency and the medium frequency being adjusted so that layers near a surface are heated substantially equally from a root of the tooth to a tip of the tooth.

35. (currently amended) A method of making a differential cage for a differential gear, said differential cage comprising a cage member having a cavity machined on an inside surface, an installation opening for introduction, accommodation, and support of compensating gears and driving gears, two bores to support respective driving shafts, one of the bores having a diameter greater than the other bore, and an axle drive gear and a parking lock gear, comprising the steps of:

forging the cage member, the axle drive gear, and the parking lock gear from a single part; and

~~A method of claim 32 wherein one of the bores has a diameter greater than the other bore and~~ press fitting a bearing sleeve ~~is press-fit~~ into said bore with the greater diameter.

36. (previously presented) A method of claim 31 wherein teeth of the axle drive shaft and parking lock gear are induction hardened.